FIELD INSPECTION REPORT FOR HUNTINGTON CREEK DISTRIBUTION SYSTEM

Prepared by Gertrudys Adkins

Field Inspection date: July 7, 2004.

OBJECTIVE: The main objectives of the field trip were to visit the diversion points and measuring device locations on the Huntington Creek, gather GPS location information, evaluate the existing condition of measuring devices, and determine necessary improvements in the system.

1. JEFFS DITCH DIVERSION

There is a 4-ft Parshall flume at this diversion that is tipped to the left by approximately 1/8 inch and from front to back by about 4 inches total. Moss was observed at the bottom of the flume, which slowed the flows at the exit. Picture #1: Parshall Flume. Picture #2: Diversion dam and headgate.

Recommendation: The channel immediately downstream from the flume should be cleaned out to allow the water to flow freely and to reduce the possibility of backwater effect on the measured flows.

2. AVERY DITCH FLUME

There is a 1-ft parshall flume at this ditch that is submerged. The ditch is very flat. Discharge measurements were taken upstream from the flume. The flow registered by the flume was 1cfs while the amount measured was computed to be 0.498 cfs. Picture #3: Parshall flume.

Recommendation: To accurately determine the discharges under submerged conditions, in addition to the upstream head measurement a second downstream head measurement must be taken. The submerged flow curves should then be used to determine the flows. To improve exit flow conditions, it is important to keep the downstream channel free of vegetation. An alternative to reduce or eliminate submergence is to raise the flume.

3. **NORTH CANAL PUMPS**

The North Canal pumps divert water out of the North Huntington Reservoir. The Cleveland Canal has a diversion out of the North Canal (Picture #6). Pictures #4 & 5: Pump structure.

Recommendation: None.

4. **CLEVELAND CANAL DIVERSION**

This diversion site has a series of 4 headgates and a catwalk. There is also another set of headgates downstream of the main headgates that serves as a regulating headgate. An 8-ft Parshall flume and real-time telemetry is used to measure the flows in this canal. The diverting structure and flume are in good condition and operating properly. Pictures # 7 & 8: Main diversion structure and headgate.

Recommendation: None.

5. **NORTH DITCH CANAL DIVERSION**

This is the lowest diversion on the Huntington Creek. No water was flowing at the time of the visit. No significant changes have occurred at this diversion since our last visit on 2001. The diverting structure is in good condition. Picture #6: Headgate and diversion dam.

Recommendation: None.

6. **HUNTINGTON CANAL DIVERSION**

There is a set of 4 headgates at the head of the canal and another set of 3 headgates further downstream. The downstream headgates are used as regulating gates to send water back to the river when needed. Picture #10: Main diversion structure. Picture # 11: Regulating headgates.

Recommendation: None.